Oil and gas regulation in Japan: overview

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A Q&A guide to oil and gas regulation in Japan.

The Q&A gives a high level overview of the domestic oil and gas sector, rights to oil and gas, health safety and the environment, sale and trade in oil and gas, tax and enforcement of regulation. It covers transfer of rights; transportation by pipeline; environmental impact assessments; decommissioning; waste regulations and proposals for reform.

Domestic sector

1. What is the role of the domestic oil sector in your jurisdiction?

Domestic production

Japan imports most of its oil for domestic consumption. The main oil fields of Japan are located in Niigata (offshore and onshore), Akita (onshore) and Hokkaido (onshore), all of which are operated in a conventional way to produce oil. However, domestic oil production is less than 0.5% of the total volume of domestic consumption.

According to the 2020 Energy White Paper, Japan imports most of its oil from Saudi Arabia, the UAE, Qatar, Kuwait, Iran, Iraq, Oman and other countries in the Middle East. The volume of imported oil from those countries in 2018 was around 88% of the total volume of imports. Saudi Arabia and the UAE provided the largest shares at 38.2% and 25.4% respectively in 2018.

Japan does not export oil to any foreign countries.

Domestic market structure

In principle, oil exploration in Japan must be carried out by a private sector operator that has obtained the relevant prospecting rights (*shi-ku-tsu-ken*) under the Mining Law. Once an oil field is discovered, the development and production must be carried out by a private sector operator that has obtained the relevant digging rights (*sai-ku-tsu-ken*) under the Mining Law.

JOGMEC, an independent administrative corporation, is exploring Japanese territorial waters using the 3D geophysical exploration vessel *Shi-gen* for the purpose of increasing domestic oil production and decreasing dependence on the Middle East. If an oil field is discovered, it is expected that a selected private operator will do the development work, which JOGMEC will financially support.

Government policy objectives

The government's policy on oil is pursued in accordance with the Basic Energy Plan formulated under the Basic Act on Energy Policy of Japan. The Basic Energy Plan must be reviewed at least every three years and changed as necessary by decision of the Cabinet. The principle of the Basic Energy Plan is known as "3E + S":

- Stable supply of Energy.
- Improvement of Economic efficiency.
- Adaptation to the Environment.
- Safety.

Current market trends

The government aims to decrease its energy dependence on the Middle East by:

- Pushing the acquisition of overseas interests by Japanese companies by taking advantage of the recent weak oil price in the international market.
- Developing domestic natural resources.
- Promoting the construction of a joint stockpile scheme across Asia.

2. What is the role of the natural gas sector in your jurisdiction?

Domestic production

Japan imports most of its natural gas for domestic consumption. The main gas fields in Japan are located in Niigata (onshore and offshore) and Chiba (onshore), both of which employ conventional gas production techniques. However, domestic production of natural gas corresponds to only 2% to 3% of the total domestic consumption volume.

Natural gas imports/exports

There is no gas pipeline connecting Japan and overseas. Accordingly, all imports of natural gas are of liquified natural gas (LNG). According to the 2020 Energy White Paper, 78.8% of LNG imports came from regions other than the Middle East in 2018, such as the Asia-Pacific region (including Australia and Malaysia), Russia and the US. As such, dependence on the Middle East in respect of natural gas was 21.2% in 2018, which is relatively low compared with that of oil. The supply sources of natural gas to Japan have diversified as:

- Australia has gradually begun to export LNG from new LNG terminals, and as a result its share of Japanese imports has increased from 19.6% in 2012 to 36.6% in 2018.
- Papua New Guinea started to export LNG to Japan in 2014.
- Japan began LNG imports from the US deriving from shale gas in January 2017.

Japan does not export natural gas, including LNGs.

Domestic market structures

Domestic natural gas exploration is carried out by private companies that have acquired the relevant prospecting rights stipulated in the Mining Law. Domestic natural gas is developed and produced by private companies that have acquired the relevant digging rights stipulated in the Mining Law.

JOGMEC is exploring Japanese territorial waters using the 3D geophysical exploration vessel *Shi-gen* for the purpose of increasing domestic gas production and decreasing dependence on foreign countries. If a discovery is made, it is expected that the development of the gas field will be entrusted to a selected private company.

Government policy objectives

As with oil, the government's policy on natural gas is pursued in accordance with the Basic Energy Plan formulated under the Basic Act on Energy Policy of Japan. The Basic Energy Plan must be reviewed at least every three years, and changed as necessary by decision of the Cabinet. The principle of the Basic Energy Plan is known as "3E + S" (*see Question 1, Government policy objectives*).

Current market trends

Recently, the price difference has become clearer between the spot price in the global LNG market and the contract price for long-term sales contracts of LNG, which is linked to the crude oil price. Accordingly, flexibility in LNG transactions, including how the price is determined, is required. As a consequence, the Japan Fair Trade Commission released a report in June 2017 finding that destination clauses, resale-profit-sharing clauses and Take or Pay clauses that are normally found in LNG sales and purchase agreements contravene Japanese competition law in some cases.

3. Are domestic energy requirements met by domestic oil and gas production?

Oil requirements

Domestic production of crude oil is less than 0.5% of total domestic demand.

Natural gas requirements

Domestic production of natural gas accounts for only 2% to 3% of total domestic demand.

4. Are there specific government policies to encourage the exploration and production of unconventional gas or oil?

The Japanese government has begun a technological development initiative aimed at the commercialisation of methane hydrate deposits, which are thought to exist in considerable quantities in the deep sea around Japan. This project is intended to be led by the private sector from 2023 to 2027.

Regulation

Regulatory bodies

5. Who regulates the exploration and production of oil and gas?

Oil

The Ministry of Economy, Trade and Industry of Japan (METI) regulates the exploration and production of oil in Japan under the Mining Law and the Mine Safety Law.

Natural gas

METI regulates exploration and production of natural gas in Japan under the Mining Law and the Mine Safety Law.

The regulatory regime

6. What is the regulatory regime for onshore and offshore oil and gas exploration and production?

The Mining Law is the basic law for both onshore or offshore oil and natural gas fields. Under the Mining Law, oil and natural gas are designated as "specific minerals" that are particularly important for the national economy and for which stable supply must be procured. Therefore, instead of a "first-to-file" principle, a special application system has been introduced for oil and gas whereby the most appropriate applicant is given a mining right under proper control by the government.

See *Question 10* and *Question 11*.

Enforcement of regulation

7. What are the regulator's enforcement powers?

Orders

The department responsible for the Mining Law is METI.

Fines and penalties

The Mining Law stipulates requirements for the revocation of the mining rights granted under it. METI is responsible for taking the appropriate action.

The Mining Law sets out criminal penalties for violations of operators' requirements thereunder in relation to environmental and health and safety issues. The Minister of Justice is responsible for authorising criminal penalties.

8. Is there a right of appeal against the regulator's decisions?

Revocation of a mining right by METI under the Mining Law is an administrative action. If a mining right holder has any objection, it can either:

- Request an investigation by METI under the Administrative Appeal Act. A request for an investigation must be submitted to METI within three months of the revocation. An investigation under the Administrative Appeal Act can be used to dispute not only the illegality of the revocation, but also the unfairness of the revocation.

- Seek a decision by a court under the Administrative Case Litigation Act. An appeal must be lodged with the relevant court within six months after the revocation, in principle. However, the appeal with the court under the Administrative Case Litigation Act can only dispute the illegality of the revocation.

Rights to oil and gas

Ownership

9. How are rights to oil and gas held?

Ownership of underground oil and natural gas resources does not belong to the landowner. Under the Mining Law, these resources are regarded as unowned property controlled by the nation, and mining rights are necessary to explore and exploit them, even for landowners. The Mining Law provides for two types of mining rights:

- Prospecting rights to explore for oil and natural gas.
- Digging rights to exploit oil and natural gas.

Both types of mining right (a prospecting right or digging right) exist independently from the ownership of the land. As such, landowners are not entitled to dig on their land for the purpose of exploring or mining unless they are given a mining right under the Mining Law.

In principle, a mining right entitles the holder to explore or mine oil and natural gas that exists underground, even if the holder is not the landowner. However, the mining right holder generally needs to obtain permission to use the land from the landowner, such as a land rental, to the extent necessary to explore or mine the oil and natural gas.

The ownership of oil and natural gas mined by the mining right holder belongs to that right holder. Once removed from the ground, the oil and natural gas can be transferred as movable property from the mining right holder to another person under an individual contract between them. There is no registration system in Japan for the transfer of ownership of oil and natural gas.

Nature of oil and gas rights

10. What are the key features of the leases, licences or concessions which are issued under the regulatory regime?

Lease/licence/concession terms

The Mining Law provides for two types of mining rights:

- Prospecting rights to explore for oil and natural gas in an area designated by METI. A prospecting right for oil and natural gas is valid for four years, which may be extended only twice for another two years each time. The maximum duration of a prospecting right is therefore eight years.
- Digging rights to exploit oil and natural gas in an area designated by METI. A digging right has an unlimited duration.

METI can also grant mining lease rights (*so-kou-ken*) registered in respect of a prospecting right or a digging right. The holder of a mining lease right can explore or exploit the area subject to the underlying mining right.

The government does not itself hold any mining rights.

Under Article 88 of the Mining Law, METI can request a mining right holder to exchange or sell its mining right to another mining holder if:

- Multiple mining areas approved by METI overlap an area where a deposit of the same type of mineral has been identified.
- The exchange or sale of the mining right would be in the public interest, such as to allow for the efficient and economic development of the mineral deposit.

No specific local requirements are imposed on a mining right holder.

There is also no requirement for a mining right holder to share or publish the seismic data and other exploration data.

Fees

Mining rights come into effect when registered on a mining registry (*kou-gyou-gen-bo*). The mining right holder must pay a registration licence tax to register a mining right on the mining registry. As of October 2020, the registration licence tax is:

- JPY90,000 for a prospecting right.
- JPY180,000 for a digging right.

After registration of the mining right, the holder must pay a mining area tax for each mining area approved by METI to the governor of the prefecture in which the mining area is located. For instance, in the Niigata prefecture, the annual mining area tax is:

- For an oil and natural gas prospecting right: JPY200 x 2/3 per 100 acres.
- For an oil and natural gas digging right: JPY400 x 2/3 per 100 acres.

Liability

There is no limitation on the liabilities that operators may incur as a consequence of mining activities. Joint operators are free to contractually apportion liabilities between themselves. The Mining Law sets out criminal penalties for violations of operators' requirements thereunder in relation to environmental and health and safety issues.

Restrictions

Before commencing exploration or exploiting activities, an operational plan (*se-gyou-an*) must be prepared and approved by METI, under Article 63-2 of the Mining Law.

A mining right holder, whether of a prospecting right or a digging right, must commence drilling work within six months of registration of the mining right. If the mining right holder violates this obligation, the mining right can be revoked. However, the deadline to commence drilling work can be postponed if this is approved by METI.

Unless it has already been permitted by any other laws or regulations, a mining right holder must obtain consent for oil and gas operations in a restricted area from the relevant management agency or manager. This may be a municipal management agency, or if the restricted area is in a private area, it will be a private person who is authorised to manage that area. Restricted areas are areas within 50 meters of both the land surface and underground of the following:

- Railroads, tracks and roads.
- Waterways, canals, harbours, rivers, lakes, swamps and ponds.
- Bridges, embankments, dams and irrigation and drainage facilities.
- Parks, graveyards, schools, hospitals, libraries and other public spaces.

The management agency or manager of the restricted area can refuse its consent only if there is a justifiable reason to do so.

11. How are rights to explore for and produce oil and gas awarded?

Oil and natural gas are classified as "specific minerals" under the Mining Law, whereby METI will solicit and select, using a public tender, a proper operator to explore, develop and produce in areas designated by the government. In selecting the operator of oil and natural gas as the specific mineral, METI examines the operator's:

- Financial basis.
- Technical ability.
- Past development achievements.
- Development plan's feasibility.

The selected operator will then be granted a prospecting right or a digging right.

Only Japanese companies can apply for the public tender for a mining right (a prospecting right or a digging right) for oil and natural gas.

METI will examine the operator to check that it:

- Has a sufficient financial basis and technical ability to properly develop the oil and natural gas in the designated area in a reasonable manner.
- Has sufficient social credibility.
- Would not be significantly inappropriate in terms of the domestic and foreign socio-economic circumstances, and it would not harm the promotion of the relevant public interest.

Transfer of rights

12. How are oil and gas rights transferred?

Transfer of rights

Transfers of mining rights in the course of a corporate restructuring such as a corporate split (general succession) must be notified to METI.

A transfer of a mining right to a third-party transferee other than general succession in the course of a corporate restructuring requires METI's approval.

Restrictions on transfer

A transfer of a mining right to a transferee will not be approved unless the transferee:

- Has sufficient financial basis and technical ability to properly carry out development of the oil and natural gas in the designated area in a reasonable manner.

- Has sufficient social credibility.
- Would not be significantly inappropriate in terms of the domestic and foreign socio-economic circumstances, and it would not harm the promotion of the relevant public interest.

Tax

13. What payments are payable by oil and gas interest holders to the government?

Mining rights come into effect when registered on a mining registry. The mining holder must pay a registration licence tax to register a mining right on the mining registry. As of January 2021, the registration licence tax is:

- JPY90,000 for a prospecting right.
- JPY180,000 for a digging right.

After registration of the mining right, the holder must pay a mining area tax for each mining area designated by METI to the governor of the prefecture in which the mining area is located. For instance, in the Niigata prefecture, the annual mining area tax is:

- For an oil and natural gas prospecting right: JPY200 x 2/3 per 100 acres.
- For an oil and natural gas digging right: JPY400 x 2/3 per 100 acres.

14. What taxes and duties apply on import and export of oil and gas?

Petroleum and coal tax is imposed on imports of crude oil and natural gas at:

- JPY2,800 per kiloliter (KL) for crude oil.
- JPY1,860 per megatonne (MT) for natural gas.

Transportation by pipeline

15. What regulatory requirements apply to the construction of oil and gas pipelines?

Oil pipelines

Oil pipelines must be installed in accordance with the Oil Pipeline Business Law. Under the Oil Pipeline Business Law, METI first prepares an oil pipeline basic plan for the installation of an oil pipeline and transportation of oil through the oil pipeline. An approved operator must further obtain approval by METI on the following matters:

- Construction plan for installation of the oil pipeline.
- Procedures for transporting oil through the oil pipeline.

Gas pipelines

Gas pipelines must be installed in accordance with the Gas Business Act, under which METI's approval is required for a person to become a gas pipeline operator. METI will give permission for the location and installation of the gas conduit when approving that person to become a gas pipeline operator. An approved gas pipeline operator must also obtain approval from METI for the transport service agreement to transport natural gas through the gas conduit.

16. What regulatory requirements apply to the operation of oil and gas pipelines?

Oil pipelines

Oil pipelines must be operated in accordance with the Oil Pipeline Business Law. Under the Oil Pipeline Business Law, METI first prepares an oil pipeline basic plan for the installation of an oil pipeline and transportation of oil through the oil pipeline. An approved oil pipeline operator must further obtain approval by METI on the following matters:

- Construction plan for installation of the oil pipeline.
- Procedures for transporting oil through the oil pipeline.

Gas pipelines

Gas pipelines must be operated in accordance with the Gas Business Act, under which METI's approval is required for a person to become a gas pipeline operator. METI will give permission for the location and installation of the gas conduit when approving that person to become a gas pipeline operator. An approved gas pipeline operator must also obtain approval from METI for the transport service agreement to transport natural gas through the gas conduit.

17. Is there a system of third party access to pipelines and other infrastructure?

Article 22 of the Oil Pipeline Business Law prevents an oil pipeline operator from refusing to transport oil on behalf of any user of the oil pipeline unless either:

- The request does not comply with the oil transportation regulations as approved by METI.
- There is no appropriate business site and facility suitable for the transportation.
- It is difficult to transport oil due to any *force majeure* events such as acts of God.

Similarly, the Gas Business Act prevents a gas pipeline operator from refusing a consignment supply of natural gas unless there is a convincing reason for doing so.

Health, safety and the environment

Health and safety

18. What is the health and safety regime for oil and gas exploration and production, and transportation by pipeline?

Exploration

The Occupational Safety and Health Act, which is a general law concerning worker's safety and health, does not apply to workers engaged in the exploration and production of oil and natural gas (*Article 115, Paragraph 1*). Instead, a special law, the Mine Safety Act covers these matters. The Mine Safety Act requires a mining right holder to:

- Take necessary measures for any important matters regarding mine safety, such as preventing cave-ins and collapses (*Article 4*).
- Provide safety training to workers (*Article 6*).

- Obtain approval from the director or department manager of the Mine Security Supervision Bureau for the mine facility plan (*Article 8, Paragraph 1*).
- Conduct performance inspections of the mine facility (*Article 9*).

In addition, the mining workers themselves are required to observe necessary safety and security matters under Article 5 of the Mine Safety Act.

Extraction

See above, *Exploration*.

Transportation

The Petroleum Pipeline Business Law requires an oil pipeline operator to take necessary measures in relation to the health and safety of workers engaged in the transportation of oil, such as appointing a safety engineer and preparing safety procedures.

Similarly, the Gas Business Act requires a gas pipeline operator to take necessary measures in relation to the health and safety of workers engaged in the transportation of natural gas (such as appointing a chief engineer and preparing safety procedures).

Environmental impact assessments (EIAs)

19. Is an EIA required before extracting or processing onshore or offshore oil and gas?

Operators must conduct environmental assessments if their business is in a category specified under the Environmental Impact Assessment Act. However, the Environmental Impact Assessment Act does not require an environmental assessment for the development and production of oil and natural gas, whether onshore or offshore. Therefore, although the environmental requirements stipulated in the Mine Safety Law must be followed, no prior environmental assessment from the operator is required in these sectors. Environmental assessment is a separate process from approval by METI in respect of a mining right.

20. What are the different stages of the EIA?

The development and production of oil and natural gas is not subject to the Environmental Impact Assessment Act and no environmental assessment by the operator is required.

Environmental permits

21. Is there a permit regime for environmental damage or emissions produced during the extraction or processing of oil and gas?

The development of oil and natural gas in special onshore or offshore nature conservation areas specified under the Natural Conservation Act requires approval by the Minister of Environment. For ordinary regions in the nature conservation area, a notice to the Minister of Environment is required. Environmental assessment is a separate process from approval by METI in respect of a mining right.

Environmental concerns

22. Are there any specific government policies and/or incentives aimed at meeting the environmental concerns associated with the exploration and production of oil and gas?

The Japanese government aims to commercially develop methane hydrate in the territorial waters of Japan. Prospecting and assessment measures on the environmental impact on the surrounding area caused by such offshore development are now under discussion in accordance with the:

- Marine Basic Plan, as approved by the Cabinet in May 2018.
- Marine Energy and Metal Resources Development Plan, as formulated by METI in December 2013.

The volume of an operator's greenhouse gas emissions must be reported under Article 26 of the Climate Change Promotion Act.

On 25 December 2020, METI formulated a "Green Growth Strategy towards 2050 Carbon Neutrality" as an industrial policy to lead the challenging goal of achieving carbon neutrality by 2050. In the strategy, ammonia and hydrogen are expected to be gradually used as fuels replacing oil, natural gas and coal towards 2050.

Waste

23. What are the regulations on the disposal of waste products resulting from oil or gas extraction or processing?

An operator is responsible for disposing of any waste products resulting from oil or natural gas extraction or processing as industrial waste in compliance with the relevant standards and measures under the Waste Management Law.

Flares and vents

24. Do regulations apply to the flaring or venting of oil and gas?

There is no special regulation on flaring. However, exhaust gas from a vent is subject to the Air Pollution Control Act.

Decommissioning

25. What are the decommissioning obligations and liabilities that arise?

The Mining Law requires a mining operator of oil and natural gas to:

- Prepare an operational plan (*se-gyou-an*).
- Obtain approval from METI.
- Conduct mining operations in compliance with that operational plan.

The operational plan must contain a decommissioning plan, and the mining operator must decommission facilities in compliance with the operational plan as approved by METI.

Under Article 117 of the Mining Law, METI can require a mining right holder to provide a cash deposit of up to 1% of the price of the oil and natural gas as security indemnification for mine pollution.

Sale and trade

26. How is trade in oil and gas usually carried out?

Japan imports most of its oil and natural gas for domestic consumption. Importers of oil and natural gas normally consume the imported oil and natural gas themselves in thermal power plants and as oil-product raw materials, or distribute gas to domestic consumers. If they do not consume the oil and natural gas themselves, it will be sold through bilateral transactions in the market.

27.Are oil and gas prices regulated?

Japan imports most of its oil and natural for domestic consumption. There is no domestic regulation to control the price of oil and natural gas.

Insurance

28. Are there any insurance requirements that must be met by companies exploring for, producing or transporting oil and gas?

Under Article 117 of the Mining Law, METI can require a mining right holder to deposit up to 1% of the price of oil and natural gas money as security indemnification for mine pollution. This deposit requirement also functions as a security for decommissioning.

Reform

29. Are there plans for changes to the legal and regulatory framework?

The Basic Energy Plan formulated under the Basic Act on Energy Policy of Japan must be reviewed at least every three years, and changed as necessary by decision of the Cabinet. There are no significant anticipated changes to the legal and regulatory framework.

Contributor profiles

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Professional qualifications. Attorney-at-law, Japan, 1999; New York, US, 2007

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Recent transactions

- Legal support to several Japanese utilities with respect to their LNG procurements.
- Legal support to a Japanese thermal generation company with respect to its wholesale of electricity and gas.

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Recent transactions

- Legal support to a Japanese oil company that is an operator of an oil exploration project in Japan in 2019.
- Legal support to a Japanese trading company with respect to transfer of oil and gas interests in Indonesia in 2017 to 2018.
- Legal support to a Japanese oil company with respect to transfer of oil and gas interests in North Sea in 2020.
- Legal support to a Japanese bank with respect to participation in an FPSO project in Africa during 2017 to 2019.
- Legal support to a Japanese oil company with respect to a joint venture project for oil exploration with a Thai oil developer in 2018.

Languages. Japanese, English

Professional associations/memberships. Japan Federal Bar Association.

Publications. *Introduction to Mining Law (Co-author, International Law Office Newsletter, Globe Business Publishing, UK, London, 2020).*

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